

Notice of Allowability

Application No.

09/865,645

Examiner

Carone, Michael

Applicant(s)

TIPPMANN, DENNIS J.

Art Unit

3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the interview of 4/14/04.
2. ☒ The allowed claim(s) is/are 8 and 10-15.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☒ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Carone, Michael
SPE
Art Unit: 3641

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The following amendments were initiated by the Office to either better clarify the claims or define over the art of record as appropriately indicated in the Reasons for Allowance. Authorization for this examiner's amendment was given in a telephone interview with Mr. Cooper on 4/5/04.

- In claim 8, line 7, the phrase "forms an arcuate path" was changed to – forms a slight arcuate path--.
- Claim 9 is cancelled
- In claim 10, line 3, the phrase "having a directional axis of firing" was changed to –having an aiming direction--.
- In claim 10, line 5, the phrase "the directional axis of firing" was changed to –the aiming direction --.
- In claim 11, line 2, the phrase "the directional axis of firing" was changed to –the aiming direction --.
- In claim 12, line 3, the phrase "the directional axis of firing" was changed to –the aiming direction --.
- In claim 13, line 3, the phrase "the directional axis of firing" was changed to –the aiming direction --.
- The dependency of claim 14 was changed to –claim 10—

- In the specification, page 3, line 24, the phrase "a line of fire direction" was changed to --an aiming direction--.
- In the specification, page 10, lines 18 and 19, the phrases " line of fire 104" was changed to --the aiming direction 104--.
- In the specification, page 10, lines 21-22, the phrase "the line of fire 104" was changed to --the aiming direction 104--.
- In the specification, page 11, line 2, the phrase "the line of fire 104" was changed to --the aiming direction 104--.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: Claim 8 was amended to overcome a reference to a barrel that shoots around a corner, such as shown by the article "Experimental Curved Barrel Machine Gun developed from the RPK light machine gun (1960)". The term "slight" added to the claim is found at least on page 6, line 6 and page 8, line 16 of the specification. The phrase "slight arcuate path" defines a curve such that would merely place a spin on the ball but would not be sufficient enough to substantially change the trajectory of the ball from the longitudinal line of sight.

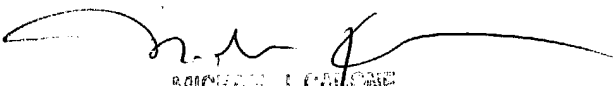
The rejection in the previous Office action over the rifling of a barrel has been withdrawn. It is noted that the claim required that the inner wall of the barrel forms an arcuate path. Rifling is a feature in the inner wall and not the wall itself.

Claim 10 (covering Figure 6 of applicants invention) defines over the prior art such as the RPK article described above. In the RPK article, the line of sight and the firing mechanism are substantially parallel. The bore of the barrel routes the projectile from the axis of firing for firing around corners.

In the specification and claims the phrase "firing direction" was changed to "aiming direction" since aiming direction was more descriptive of line 104 in Figure 6.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication should be directed to Michael J Carone at telephone number 703 306-4198.



MICHAEL J. CARONE
SUPERVISORY PATENT EXAMINER